

B.Tech. SEM -V (Chemical 2014 Course (CBCS) : SUMMER - 2019
SUBJECT: ELECTIVE-I COMBUSTION ENGINEERING

Day: Wednesday
Date: 15/05/2019

S-2019-2645

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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Q.1 Describe the various properties of fuels and also mention different methods for determination of calorific value. **[10]**

OR

Describe the different types of fuels in detail.

Q.2 Define low temperature carbonization and high temperature carbonization. **[10]**

OR

Describe different types of coal-combustion techniques.

Q.3 Describe the refinery operations with a neat schematic. **[10]**

OR

Draw a schematic of coke- oven and describe its construction and working.

Q.4 Describe the global scenario of liquid fuels. **[10]**

OR

Describe the production of water gas with a neat process flow diagram.

Q.5 Define: **[10]**

- i) Calorific value
- ii) Flame properties

OR

Describe the steps for combustion air calculation.

Q.6 Write short notes on: **[10]**

- i) Advantages and disadvantages of incineration
- ii) Moving grate incineration.

OR

- i) Furnace and Boilers
- ii) Application of incineration

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